

2d. That charcoal burning should only be permitted under proper control and subject to regulation.

3d. That a considerable portion of the lands at high elevations and now in ground provisions or abandoned, together with all ravine sides, ridges, and prominences in the lower levels, should gradually be re-clothed as funds become available.

Perhaps the most important change recommended by the committee in the scheme as presented by Mr. Kortright is that the belt of pasture land lie immediately above the cane lands instead of being separated therefrom by a belt of forest. This change being made together with a few other immaterial alterations, the draft as presented by its author will go to the council for its approval in a short time. If I am correctly informed in the matter it will be passed by the council without delay, and the work of execution begun at once.

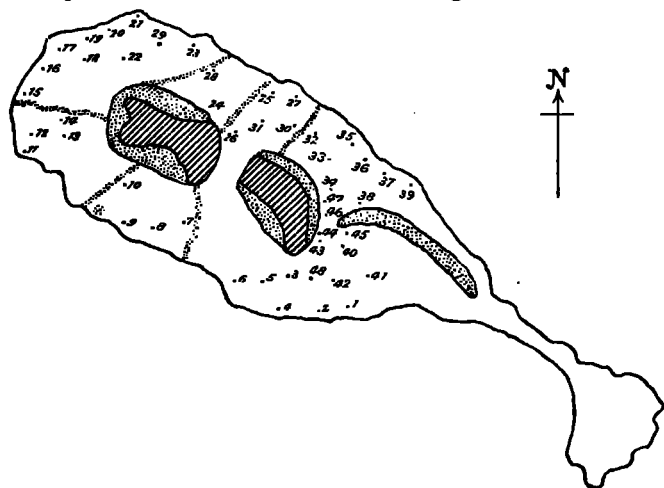


FIG. 1—St. Kitts, W. I.

Existing forest area, section lined. Probable area of reforestation, dotted. There are many minor areas which would probably be placed in forest, not shown.

Reference table.

Number on map.	Name of rainfall station.	Height above sea.	Number on map.	Name of rainfall station.	Height above sea.
		Feet.			Feet.
1	Buckley	140	25	Mills	100
2	Camp	80	26	Phillips	550
3	Ben Lomond	600	27	Bouryeaux	100
4	West Farm	120	28	Estridge	350*
5	Ottley P. P. ....	.....	29	Lavington .....	.....
6	Stone Fort	270	30	Lodge	500
7	Wingfield	200	31	Molyneux	360
8	Lamberts	170	32	Brighton	375
9	Con Phipps	100	33	Spooner	290
10	Vambelle	500	34	Whites	650
11	Leper Asylum	50	35	Hermitage .....	.....
12	Bourkes	130	36	Cunningham .....	.....
13	Burts	400	37	Canada Lower	130
14	Farm	290	38	Canada Upper	520*
15	La Vallee	100	39	Conaree .....	.....
16	Cranstouns	300*	40	Needsmust	50
17	Brothersons	90*	41	Pond	10*
18	Belmont .....	.....	42	Shadwell	150*
19	Willets	50*	43	Milliken	800
20	White Gate	70*	44	Fountain	850*
21	Caines	25	45	Stapleton .....	.....
22	Profit	400	46	Bayfords .....	.....
23	Bellevue .....	.....	47	Green Hill .....	.....
24	Mansion	320	48	Olivees	460

* Estimated.

So much, then, for the formative stage of the question. In order to arrive at something of an idea as to just what is hoped to be accomplished I have asked Mr. Kortright to prepare for me a map of St. Kitts showing the location of existing forests and the lands that it is proposed to reforest. The accompanying map, fig. 1, is the answer to my request. This map should be studied in connection with the one on page 487, MONTHLY WEATHER REVIEW for November, 1900, and it will then be observed that the forest areas as they now exist are simply the mountain tops and that it is proposed to reforest the mountain slopes and the banks of the streams. The figures on the map and the reference table are valuable

only as locating stations from which rainfall data have been collected, and may be helpful in studying the climatology of St. Kitts. The elevations marked "estimated" were put in by me and were obtained from the persons rendering the rainfall reports. All other entries are by Mr. Kortright.

There are many and substantial reasons for the planting of trees, so many in fact, that it is quite unnecessary to drag in fallacious arguments because expectations based upon conclusions drawn from false premises are almost certain to bring disappointment, resulting in a hasty and unreserved condemnation, in toto, of a really meritorious measure. The results that may be reasonably expected must be known before it can be determined whether or not the expense is justified. Of course in this particular case the matter has passed beyond the argumentative stage but no harm can possibly come from the statement of a few facts—the teachings of meteorology are abundantly substantiated by experimentation.

It is quite evident from the correspondence relative to the subject of reforestation that in many minds there still lingers a vague idea that the rainfall is actually increased or decreased by the existence or nonexistence of forests. This idea finds neither encouragement nor support in the extensive experiments made, notably in India, on this very point. Professor Abbe, writing on this line, says:

As regards the effect of forests and deforestation on rainfall, you may safely assert that it is absolutely inappreciable; but the effect of the protection from wind on the catch at the gage is very considerable. Thus, in India, in a certain barren region, the gages caught little rain. As the forest grew up the gages caught more rain, while the gages just outside the forest region caught just the same as ever, and gages raised on high supports above the trees caught as little as before, showing that there had been no change in the rainfall, but merely a change in the error introduced by the action of the wind on the falling drops at the mouth of the gage.

Of course, all the waste land in the island not used for sugar or food crops should be devoted to the best forest growth, not only for the crop but for the protection against storm winds and for aesthetic purposes. The accumulation of rich soil beneath forests and the retention of water in shaded forest soil is so important that forest growth should be encouraged by rewards and barren wastes be discouraged by taxation.

The conclusion of the whole matter, then, seems to be that trees are valuable as conservators of moisture, as a protection against winds and floods, as timber, and for aesthetical purposes; but there is absolutely no good reason for hoping to increase the rainfall by planting trees.

MEXICAN CLIMATOLOGICAL DATA.

Through the kind cooperation of Señor Manuel E. Pastrana, Director of the Central Meteorologic-Magnetic Observatory, the monthly summaries of Mexican data are now communicated in manuscript, in advance of their publication in the Boletín Mensual. An abstract, translated into English measures, is here given, in continuation of the similar tables published in the MONTHLY WEATHER REVIEW since 1896. The barometric means are now reduced to standard gravity.

Mexican data for June, 1901.

Stations.	Altitude.	Mean barometer.*	Temperature.			Relative humidity.	Precipitation.	Prevailing direction.	
			Max.	Min.	Mean.			Wind.	Cloud.
Culiacan (Sin.)	Feet. 112	Inch. 29.60	103.5	69.1	85.5	55	.....	s. ne.	ne.
Durango (Seminario)	6,243	23.98	98.6	48.2	75.0	25	0.05	no.	e.
Leon (Guajaluto)	5,906	24.21	93.0	55.6	75.6	34	1.26	ese.	sw.
Linares (Nuevo Leon)	1,188	28.55	98.8	64.4	83.5	59	8.62	s.	s.
Mazatlan	25	29.80	86.2	69.3	79.2	77	T.	nw.	se.
Mexico (Obs. Cent.)	7,472	22.98	86.2	51.8	66.0	54	1.52	n.	.....
Morelia (Seminario)	6,401	23.88	87.8	53.8	69.8	59	2.31	sw.	e.
Puebla (Col. Cat.)	7,125	23.81	84.7	53.6	69.6	54	4.59	e.	sw.
Saltillo (Col. S. Juan)	5,399	24.71	91.4	57.2	74.5	63	0.67	nw.	s.
S. Isidro (Hac. de Gto) .....	.....	.....	86.0	71.6	.....	.....	1.38	.....	.....
San Luis Potosí	6,202	24.05	92.2	59.0	73.4	50	0.11	e.	e.
Toluca	8,812	21.91	84.0	39.2	61.7	54	3.34	w.	e.
Zapotlan (Seminario)	1,548	25.00	95.0	55.2	73.9	52	1.91	ase.	w.

* Reduced to standard temperature and gravity.